

Claims

1. A pressure limiting valve (10), having a valve holder (1), a valve insert (2) connected to the valve holder (1), a valve piston (3) supported slidably in the valve insert (2), and a compression spring, acting upon the valve piston (3) with a pressure force acting in the closing direction, characterized in that an adjusting shim (4) is disposed between the valve piston (3) and the compression spring (5) such that the compression spring (5) is braced on one end on a bottom piece of the valve holder (1) and on the other on a face of the adjusting shim (4) facing away from the valve piston (3).
2. The pressure limiting valve of claim 1, characterized in that the valve insert (2) has a cup-shaped recess (2a), in which the adjusting shim (4) is slidably supported.
3. The pressure limiting valve of one of the foregoing claims, characterized in that the valve holder (1) is cup-shaped and has at least two subregions (1a, 1b), each with a different inside diameter (D1, D2), and the subregions (1a, 1b) merge with one another in steplike fashion.
4. The pressure limiting valve of one of the foregoing claims, characterized in that the first subregion (1a) of the valve holder (1) having the lesser inside diameter (D1) serves to receive the compression spring (5); and that the second subregion (1b) having the greater inside diameter (D2) embraces the valve insert (2) from outside.
5. The pressure limiting valve of one of the foregoing claims, characterized in that the valve holder (1) and the valve insert (2) are calked to one another.
6. The pressure limiting valve of one of the foregoing claims, characterized in that the valve holder (1) and the valve insert (2) are screwed together.

7. The pressure limiting valve of one of the foregoing claims, characterized in that the steplike transition of the valve holder (1) formed by the different diameter regions (diameters D1, D2) is seated on the valve seat (2).
8. The pressure limiting valve of one of the foregoing claims, characterized in that at least one flat place (3a, 3a.1, 3a.2, 3a.3) is provided on the outer circumference of the valve piston (3).
9. The pressure limiting valve of one of the foregoing claims, characterized in that three flat places (3a, 3a.1, 3a.2, 3a.3) are provided on the outer circumference of the valve piston (3), which are distributed uniformly over the circumference of the valve piston (3).
10. The pressure limiting valve of one of the foregoing claims, characterized in that the flat places (3a) are disposed on the valve piston (3) such that they extend parallel to the longitudinal axis of the valve piston (3).
11. The pressure limiting valve of one of the foregoing claims, characterized in that the flat places (3, 3a.1, 3a.2, 3a.3) are oriented at an angle relative to the longitudinal axis of the valve piston (3).
12. The pressure limiting valve of one of the foregoing claims, characterized in that the adjusting shim (4) has a fluid-passable recess (4a).
13. The pressure limiting valve of one of the foregoing claims, characterized in that the recess (4a) is disposed eccentrically.
14. The pressure limiting valve of one of the foregoing claims, characterized in that an outflow conduit (1c) is provided in the valve holder (1).

15. The pressure limiting valve of one of the foregoing claims, characterized in that the outflow conduit (1c) is embodied as a bore connecting the interior of the cup of the valve holder (1) with the outer jacket face of the valve holder (1).
16. The pressure limiting valve of one of the foregoing claims, characterized in that the axis (A) of the outflow opening is positioned at an angle relative to the longitudinal axis (A1) of the valve holder (1).
17. The pressure limiting valve of one of the foregoing claims, characterized in that an outflow conduit (1c) is provided in the valve insert (2).
18. The pressure limiting valve of one of the foregoing claims, characterized in that the valve piston (3) has a piston rod (3b), which protrudes into the cup-shaped recess (partial chamber 1a) of the valve holder (1).
19. The pressure limiting valve of one of the foregoing claims, characterized in that the compression spring (5) is embodied as a conical spring.
20. The pressure limiting valve of one of the foregoing claims, characterized in that the compression spring (5) concentrically surrounds the piston rod (3b) of the valve piston (3).
21. The pressure limiting valve of one of the foregoing claims, characterized in that the adjusting shim (4) is slipped onto the piston rod (3b) of the valve piston (3) and rests there on a steplike seat.